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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,957	06/09/2004	Masuhiko Natsuhara	39.016-C	3956

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EXAMINER

KACKAR, RAM N

ART UNIT PAPER NUMBER

1763

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/709,957

Applicant(s)

NATSUHARA ET AL.

Examiner

Ram N. Kackar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The new limitations of (b-a) being greater than 0 μm and less than 35 mm in amended claim 1, being in the range from 50 μm to 35 mm in claim 2, being in the range from 10mm to 30 mm in claim 9 and the ratio of b/a in claims 10-12 is new matter. The specification does not say that (b-a) could not be 0 but only more than 0. Similarly there is no upper limit on (b-a) and there is no mention of the ratios of b/a in the specification. Further, Fig 1, 2, 4 and 5 where (b) is greater than (a) the difference (b-a) appears more than in prior art of Aruga et al and Niori et al. The applicant has picked specific examples from a table and back engineered them in to a broad generalization, which is not part of the specification in its essence.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Aruga et al (US 5688331).

Aruga et al disclose a wafer holder for semiconductor manufacturing equipment (Fig 6-39) with a diameter of the wafer-carrying surface clearly smaller (more than 50 μ m) than the diameter of the opposite side. The wafer holder is disclosed to be of ceramic (abstract) with embedded heating element (43). Aruga discloses the diameter gradually expanding (Col 5 lines 10-15).

5. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Niori et al (US 5800618).

Niori et al disclose a wafer holder for semiconductor manufacturing equipment (Fig 6-31) with a diameter of the wafer-carrying surface clearly smaller (more than 50 μ m due to flange 31c) than the diameter of the opposite side. The wafer holder is disclosed to be of ceramic (abstract) with embedded heating element (Fig 4 and Col 13 lines 38-45). Ring shaped flange 31c is disclosed at Col 16 lines 55-59.

6. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Komino et al (US 7033444) or under 35 U.S.C. 102(b) by its Japanese equivalent (JP 2001068538).

Komino et al disclose a wafer holder for semiconductor manufacturing equipment (Fig 1-4 and Fig 2-38) with an embedded heating element with a diameter of the wafer-carrying surface smaller than the diameter of the opposite side. The diameter of the opposite side being same as

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that of insulator 42 disclosed to be 230mm (Col 14 lines 4-7). Since the standard substrate for semiconductor is 200mm the difference (b-a) appears to be less than or equal to 30mm. The substrate holding part being made of ceramic (Col 8 lines 7-12). From Fig 1 the diameter (a) appears to be more than 200mm. Therefore the ratio will be about the higher range of claimed ratio.

7. Claims 1-8 and 10-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Uchiyama et al (US 20020158060).

Uchiyama et al disclose a wafer holder (Fig 7-3) for semiconductor (Para 2) manufacturing equipment (Fig 1-4 and Fig 2-38) with a heating element on the side with a diameter of the wafer-carrying surface smaller than the diameter of the opposite side (being 230mm as in paragraph 136). As seen the difference is half the thickness of support 11 (2.5 mm as in paragraph 141) on one side. Therefore the total difference of diameters will be about 2.5mm. Therefore the ratio will be $230/227.5 = 101.09$.

Response to Arguments

Applicant's arguments filed 6/19/2006 have been fully considered but they are not persuasive.

Applicant argues that none of art recited earlier makes any mention of the diameter of either face. This is not correct since Aruga discloses the diameter gradually expanding (Col 5 lines 10-15) and Niori discloses flange 31c explicitly at Col 16 lines 55-59.

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Applicant further argues that none of the prior art recognize the problem faced by the applicant.

In response it is stated that for anticipatory rejection it is only necessary to show in prior art disclosure of all the elements.

Moreover, the amendments are considered a new matter since there is no appreciation in the specification of limits to the difference as recited in claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

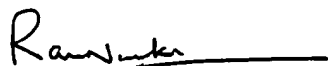
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ram N. Kackar whose telephone number is 571 272 1436. The examiner can normally be reached on M-F 8:00 A.M to 5:P.M.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571 272 1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Ram Kackar', followed by a horizontal line.

Ram Kackar
Primary Examiner AU 1763